

CLAIMS

1. A lipid composition, comprising an interesterified structured lipid component and a phytosterol component:

    said structured lipid component is a reaction product of an interesterification reactant charge, said reactant charge having between about 15 and about 75 weight percent, based upon the total weight of the charge, of a medium chain triglyceride having fatty acid chains from C6 to C12 in length, reacted with between about 15 and about 85 weight percent, based upon the total weight of the charge, of a long chain domestic oil having fatty acid chains of at least C16 in length; and

    said interesterified structured lipid component comprises at least about 80 weight percent of the lipid composition, and said phytosterol ester component comprises between about 4 and about 20 weight percent of the lipid composition, both based on the total weight of the lipid composition.

2. A composition for decreasing atherogenic risk in individuals, comprising the lipid composition of claim 1, and said lipid composition, when ingested by a hypercholesterolemic individual, reduces the LDL cholesterol level of said individual by at least about 10 percent, optionally at least about 15 percent.

3. The composition in accordance with claim 2, wherein said lipid composition reduces the total cholesterol level of said individual by at least about 8 percent, optionally at least about 12 percent.

4. The composition in accordance with claim 2 or 3, wherein said lipid composition does not significantly reduce the HDL cholesterol level of said individual.

5. The composition in accordance with claim 2, 3 or 4, wherein said lipid composition reduces adipose mass of said individual.

6. The composition in accordance with any of claims 1-5, wherein said structured lipid component comprises at least about 88 weight percent of the composition, and said phytosterol ester component comprises up to about 12 weight percent of the composition, both based upon the total weight of the composition.

7. The composition in accordance with any of claims 1-5, wherein said structured lipid component comprises at least about 90 weight percent of the composition, and said phytosterol ester comprises up to about 10 weight percent of the composition, both based upon the total weight of the composition.

8. The composition in accordance with any of claims 1-5, wherein said structured lipid component comprises at least about 92 weight percent of the composition and said phytosterol ester comprises up to about 8 weight percent of the composition, both based upon the total weight of the composition.

9. The composition in accordance with any of claims 1-8, wherein said medium chain triglyceride amount is between about 30 and about 60 weight percent of the interesterification charge, and the amount of the domestic oil is between about 40 and about 70 weight percent of the charge.

10. The composition in accordance with any of claims 1-8, wherein said medium chain triglyceride amount is between about

35 and about 55 weight percent of the interesterification charge, and the amount of the domestic oil is between about 45 and about 65 weight percent of the charge.

11. The composition in accordance with any of claims 1-10, wherein said structured lipid component has a Brookfield viscosity of between about 20 and about 52 centipoise, measured at 20°C with a No. 4 spindle at 50 rpm on a Brookfield Viscometer.

12. The composition in accordance with any of claims 1-11, wherein said structured lipid component has a smoke point of at least about 195°C (at least about 383°F).

13. The composition in accordance with any of claims 1-11, wherein said structured lipid component has a smoke point of at least about 205°C (at least about 400°F).

14. The composition in accordance with any of claims 1-13, wherein said phytosterol ester component has no greater than about 20% by weight, based upon the total weight of the phytosterol ester component, of a phytostanol.

15. The composition in accordance with any of claims 1-14, wherein said lipid composition is administered to the individual at a level of between about 0.4 grams and about 2 grams of said composition per kilogram of body weight per day.

16. The composition in accordance with any of claims 1-15, wherein said lipid composition is a clear liquid and remains a clear liquid for at least about six months of storage at about 21°C.

17. The composition in accordance with any of claims 1-16, wherein said lipid composition has sensory attributes which are not significantly different from, or are significantly superior to, corresponding sensory properties of canola oil and/or of olive oil.

18. The composition in accordance with any of claims 1-17, wherein said medium chain triglyceride is selected from the group consisting of caprylic triglyceride, capric triglyceride, and combinations thereof, wherein said domestic oil is selected from the group consisting of soybean oil, corn oil, cottonseed oil, canola oil, olive oil, peanut oil, safflower oil, sunflower oil, oil from grain plants, and combinations thereof.

19. A method for making a lipid composition for reducing atherogenic risk in individuals, comprising:

providing a medium chain triglyceride having carbon chain lengths of between C6 and C12;

providing domestic oil having carbon chain lengths of between C16 and C22;

introducing a reactant charge to a reaction location, the reactant charge including between about 15 and about 85 weight percent of the medium chain triglyceride and between about 15 and about 85 weight percent of said domestic oil, based upon the total weight of the reactant charge;

interesterifing said reactant charge into an interesterified structured lipid component; and

combining said interesterified structured lipid component with a phytosterol ester component to provide a lipid composition which is consumable by an individual and which reduces atherogenic risk for said individual, said combining being such that said the lipid composition contains at least about 80 weight percent of the structured lipid component and

up to about 20 weight percent of the phytosterol ester component, based on the total weight of the lipid composition.

20. The method in accordance with claim 19, wherein said lipid composition has a Brookfield viscosity of between about 20 and about 52 centipoise, measured at 20° with a No. 4 spindle at 50 rpm on a Brookfield Viscometer.

21. The method in accordance with claim 19 or 20, wherein said lipid composition has a smoke point of at least about 195°C (at least about 383°F).

22. A method for using the lipid composition of any of claims 1-18, comprising decreasing the atherogenic risk in an individual by administering the lipid composition to said individual in order to promote the health and nutrition of said individual, including reducing adipose mass of said individual.

23. The method in accordance with claim 22, wherein said individual is hypercholesterolemic and said administering reduces the LDL cholesterol of said individual by at least about 10 percent, optionally at least about 15 percent.

24. The method in accordance with claim 22, wherein said individual is hypercholesteroliemic and said administering reduces the total cholesterol of said individual by at least about 8 percent, optionally at least about 12 percent.

25. The method in accordance with any of claims 22-24, wherein said administering does not significantly reduce the HDL cholesterol level of said individual.

26. The method in accordance with any of claims 22-25, wherein said administering is at a level of at least about 0.4 grams of said lipid composition per kilogram of body weight of said individual.

27. The method in accordance with any of claims 22-25, wherein said administering is at a level of between about 0.4 and about 2 grams of said lipid composition per kilogram of body weight of said individual.

28. The method in accordance with any of claims 22-25, wherein said administering is at a level of between about 0.6 and about 1 gram of said lipid composition per kilogram of body weight of said individual.